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ABSTRACT

This study compared the results of group tests of computational skills and tests of knowledge and skills in mathematics between three groups of first and fifth grade students from the United States, Japan, and Taiwan. The battery of tests were constructed after reviewing the mathematics textbooks used in each location and discussing the major goals of mathematics with mathematics educators. Tests administered to individuals included word problems, conceptual knowledge, mathematical operations, graphing, estimation, visualization, transformation or spatial relations, and mental calculations. Group tests were used to test computation skills. The results of the group testing and the individually administered tests are reported separately in two different sections. The methodology of the testing includes a description of the tests, selection of the sample, a description of the examiners, and the testing procedure. All items in each test, along with the percentages of students in each city responding correctly to each item, are presented in the appendixes. The results of the group tests appear in Appendix A and the individual tests in Appendix B. (KR)

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Appendix 15

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